

We claim:

1. A method for the prophylactic treatment of a subject whose  
5 blood has undergone extracorporeal circulation, wherein an  
effective amount of an anticoagulant agent is administered to  
said subject.
2. A method as claimed in claim 1, for the prophylaxis of  
10 vascular complications after the extracorporeal circulation.
3. A method for treating a subject with extracorporeal  
circulation, wherein an effective amount of an anticoagulant  
15 agent is administered to said subject for effective  
anticoagulant protection during the extracorporeal  
circulation and for prophylaxis of vascular complications  
after the extracorporeal circulation.
4. A method as claimed in claims 1 or 3, wherein the  
20 anticoagulant agent has a terminal half-life of at least  
about 4 hours.
5. A method as claimed in claim 4, wherein the anticoagulant  
agent has an enduring pharmacodynamic activity.  
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6. A method as claimed in claims 1 or 3, wherein PEG-hirudin is  
administered.
7. A method as claimed in claims 1 or 3, for treating a subject  
30 with chronic renal insufficiency requiring regular  
hemodialysis.
8. A method as claimed in claim 7, wherein the anticoagulant  
agent is administered in the form of a single dose per  
35 hemodialysis.
9. A method as claimed in claim 8, wherein the single dose is  
administered at the start of a hemodialysis.
- 40 10. A method as claimed in claim 8 or 9, wherein the amount of  
the single dose administered for a hemodialysis is such that  
the APTT is prolonged about 2.7-fold to about 1.8-fold during  
the hemodialysis.

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11. A method as claimed in any of claims 8 to 10, wherein the amount of the single dose administered for a hemodialysis is such that the APTT is prolonged at least about 1.2-fold until the next hemodialysis.

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